

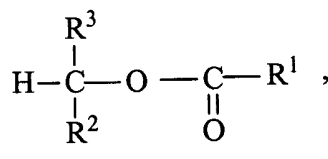
A. Amendments to the Claims:

The below listing of the Claims will replace all prior versions and listings of the claims in the subject application.

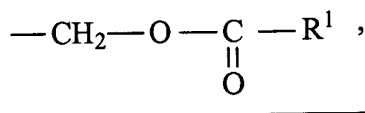
Claim 1. (Currently Amended) A composition for lubricating metallic work pieces comprising:

- (a) an oil having a viscosity of about 75 cSt to about 90 ~~160~~ cSt at 25°C;
- (b) free sulfur in an amount sufficient to provide lubrication, and
- (c) a metal corrosion inhibitor to prevent corrosion of said work pieces;

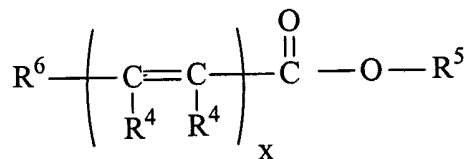
wherein said metal corrosion inhibitor is a fatty oil selected from the group consisting of a glyceride, an ester of a carboxylic acid, and combinations thereof, wherein said glyceride is represented by the formula of



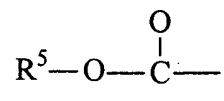
wherein R¹ is a saturated or unsaturated C₃ to C₂₄ aliphatic hydrocarbon, and R² or R³ is hydrogen or



wherein R¹ is as defined above, and said ester is represented by the formula of



wherein R⁴ is hydrogen or a saturated or unsaturated C₃ to C₁₂ aliphatic hydrocarbon, X is 1, 2 or 3, R⁵ is a saturated or unsaturated C₃ to C₂₄ aliphatic hydrocarbon, and R⁶ is represented by the formula of



wherein R⁵ is as defined above; and

wherein said lubrication is demonstrated by a Falex reference load of greater than about 4,500 pounds force and by a Falex reference wear of less than ten teeth and further wherein said composition when maintained at 100°C for 2 hours has a copper strip corrosion classification from about 1a to about 3b.

Claim 2. (Original) The composition of Claim 1, wherein said composition is a metalworking composition.

Claim 3. (Canceled)

Claim 4. (Original) The composition of Claim 1, wherein said fatty oil is about 5 to about 30 volume percent based on said composition.

Claim 5. (Original) The composition of Claim 1, wherein said sulfur is present in amounts of from about 0.4 to about 12 percent by weight of said composition.

Claims 6-8. (Canceled)

Claim 9. (Original) The composition of Claim 1, wherein said composition has a Four-Ball wear scar diameter of less than about 0.07 mm.

Claim 10. (Original) The composition of Claim 1, wherein the metallic work pieces are nonferrous metallic work pieces.

Claim 11. (Currently Amended) A composition for lubricating nonferrous metallic work pieces comprising:

(a) an oil having a viscosity of about 75 cSt to about 90 cSt at 25°C suitable for heavy duty metalworking operations; and

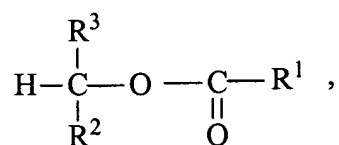
(b) free sulfur being present in amounts of about 0.4 percent to about 12 percent by weight of said composition;

wherein said composition does not corrode said nonferrous work pieces and further wherein said composition when maintained at 100°C for 2 hours has a copper strip corrosion classification from about 1a to about 3b.

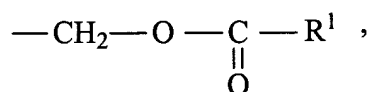
Claim 12. (Original) The composition of Claim 11, wherein said sulfur is not chemically bound to molecules in said oil.

Claim 13. (Canceled)

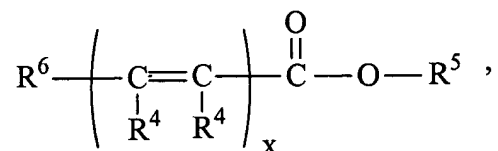
Claim 14. (Original) The composition of Claim 11, further comprising a fatty oil selected from the group consisting of a glyceride, an ester of a carboxylic acid, and combinations thereof, wherein said glyceride is represented by the formula of



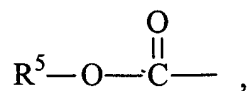
where R^1 is a saturated or unsaturated C_3 to C_{24} aliphatic hydrocarbon, and R^2 or R^3 is hydrogen or



wherein R^1 is as defined above, and said ester is represented by the formula of



wherein R⁴ is hydrogen or a saturated or unsaturated C₃ to C₁₂ aliphatic hydrocarbon, X is 1, 2 or 3, R⁵ is a saturated or unsaturated C₃ to C₂₄ aliphatic hydrocarbon, and R⁶ is represented by the formula of



wherein R⁵ is as defined above, said fatty oil being present in an amount of about 5 to 30 volume percent based on the total composition and said fatty oil.

Claim 15. (Original) The composition of Claim 11, wherein said composition has a Falex reference wear of less than ten teeth.

Claim 16. (Original) The composition of Claim 11, wherein said composition has a Falex reference load of greater than about 4,500 pounds force.

Claim 17. (Original) The composition of Claim 11, wherein said composition has a Four-Ball wear scar diameter of less than about 0.07 mm.

Claim 18. (Canceled)

Claim 19. (Original) The composition of Claim 11, further comprising from about 0.0 to 4.0 weight percent chemically bound sulfur.

Claim 20. (Currently Amended) A method of making a composition which provides non-corrosive lubrication to nonferrous metalworking processes comprising:

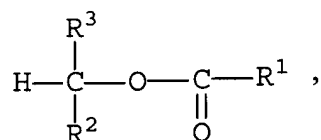
selecting a base oil having a viscosity of about 75 cSt to about 90 to 160 cSt at 25°C;

incorporating chemically unbound sulfur to said base oil to provide an extreme pressure lubricant, wherein the chemically unbound sulfur is from about 0.4 to about 12 weight percent of said composition; and

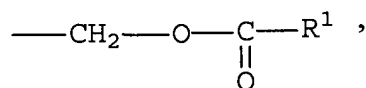
further incorporating a fatty oil to inhibit nonferrous metal corrosion.

Claim 21. (Original) The method of Claim 20, wherein said composition has a Falex reference wear of less than ten teeth.

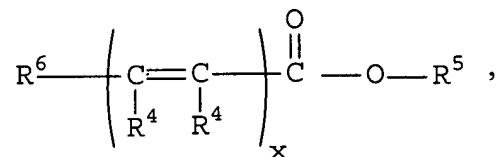
Claim 22. (Original) The method of Claim 20, wherein said fatty oil is selected from the group consisting of a glyceride, an ester of a carboxylic acid, and combinations thereof, wherein said glyceride is represented by the formula of



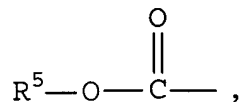
wherein R¹ is a saturated or unsaturated C₃ to C₂₄ aliphatic hydrocarbon and R² or R³ is hydrogen or



wherein R¹ is as defined above, and said ester is represented by the formula of



wherein R⁴ is hydrogen or a saturated or unsaturated C₃ to C₁₂ aliphatic hydrocarbon, X is 1, 2 or 3, R⁵ is a saturated or unsaturated C₃ to C₂₄ aliphatic hydrocarbon, and R⁶ is represented by the formula of



wherein R⁵ is as defined above, and is combined into said composition in an amount from about 5 to about 30 volume percent based on the total composition and said fatty oil.

Claim 23. (Original) The method of Claim 20, further comprising incorporating from about 0.0 to 4.0 weight percent chemically bound sulfur.

Claim 24. (Currently Amended) A method of providing noncorrosive lubrication to the metalworking of a nonferrous metal part comprising:

providing a composition which includes a base oil having a viscosity of about 75 cSt to about 90 ~~160~~ cSt at 25°C and free sulfur present in amounts sufficient to provide extreme pressure lubrication of a Falex reference load of greater than about 4,500 pounds force, wherein said composition when maintained at 100°C for 2 hours has a copper strip corrosion classification from about 1a to about 3b; and

applying said composition to the metal work part and/or a metal work tool during the metalworking process.

Claim 25. (Currently Amended) A composition for lubricating comprising:

- (a) an oil having a viscosity of about 75 cSt to about 90 ~~160~~ cSt at 25°C;
- (b) free sulfur in an amount sufficient to provide enhanced extreme pressure lubrication, and
- (c) a metal corrosion inhibitor to prevent corrosion of said work pieces, wherein said lubrication is demonstrated by a Four-Ball wear scar diameter of less than about 0.07 mm ~~mm~~.